2011 Emerging Technology Demonstrations Grant Program (ETDG II)

Questions and Answers

PON-11-501

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General Questions:

1. Could I have that last bit of advice about the cover page repeated, please?

Answer – Attachment A, Item 9, "Proposed End Date", states "(maximum duration 36 months)". This is superseded by the March 30, 2015 date which is the absolute latest date for the project to conclude. This date appears in section 8 "Funding information" of the application manual, in Attachment G item 4, and in Attachment H section 1 item 13. Applicants must schedule for work to be completed before March 30, 2015, and it is highly recommended for Applicants for schedule for work to conclude before this date.

2. Will the participants of this call be published so we connect for collaboration?

Answer – Yes, we will provide a list of participants (WebEx and in-person). Please see the end of Questions and Answers for a complete list of participants.

3. Will the presentation be available on line after the meeting?

Answer – Yes. The presentation is now online at: http://www.energy.ca.gov/contracts/pier.html#etdg.

4. Is there a different emphasis in the current solicitation (ETDG2) versus the previous solicitation in 2009 (ETDG1)?

Answer – The funding amount has increased for awards under ETDG II, and Attachment F, Targeted Technology Areas, has been revised as well.

5. What is the minimum duration of a funded proposal? Must the project last until March 2015 or can it end early?

Answer – There is no minimum project duration period. Applicants can complete all required tasks before March 30, 2015. Applicants must allow sufficient time in their proposal to finish all the tasks proposed for the project, such as equipment procurement, installation, training, commissioning and conducting the project measurement and verification.

6. If a new product is not yet tested to the extent required, but will be in the estimated 9 months before a contract would be executed, can it qualify?

Answer – No, only those projects that meet the requirements of the solicitation are eligible to apply.

7. Where are the PIER terms and conditions located? The link in the solicitation document does not lead to the terms. Thanks!

Answer – The PIER Terms and Conditions are Attachment N. The link on our website has been repaired.

8. Will you post both questions and answers from the audience and chat online? There have been several answers that need legal counsel and I'm hoping to read the answers. Thank you.

Answer – Yes. All information is posted at: http://www.energy.ca.gov/contracts/pier.html#etdg

9. Will the program/projects be run by CEC or CPUC?

Answer - Projects funded under this solicitation (PON-11-501) will be administered by the CEC.

10. What is considered project completion? Is it when equipment is installed or after operational? Who owns the equipment if purchased with CEC funds?

Answer – A project is considered complete when all tasks and subtasks contained within the project scope of work are satisfactorily completed, as determined by the CEC. This includes completion of the required measurement and verification.

For equipment ownership, please refer to Question 124.

11. How are natural gas funds and electricity funds provided for projects that have both natural gas and electricity components?

Answer – Projects will be evaluated based on the potential energy savings. If the savings include both natural gas and electricity, staff will make a determination with regard to how to split the funding.

12. How is the number of projects funded related to the amount of funds awarded to each project?

Answer – Up to \$14 million is available for this solicitation, and the minimum and maximum award sizes are \$750,000 and \$2,000,000 respectively. The number of awards made is dependent on the distribution of passing individual projects and their requested amount of PIER funding.

13. In reference to Attachment C of the application manual (Page 8, #5), does the CEC project manager approve #5, and is it applicable?

Answer – Section IV of Attachment C, which is located in the application manual file under Addendum 3, contains examples of technical products that may be required in the final agreement (see page C-5). Section IV, Task 5 (Site Selection) contains boilerplate language that applies when field test site details have not been determined at the commencement of the agreement. The CEC reserves the right to determine whether a demonstration site meets the requirements of this solicitation.

Please review Attachment C and find Item I "Technical Task List" on page C-1, second paragraph. It discusses two tasks (2.1 and 2.2) that are required to be performed by the Applicant at the beginning of the project, at the kick-off meeting. These tasks also appear on page C-4. Task 2.1 requires the grant recipient to verify that the proposed demonstration site can still host the project, or else to obtain a new demonstration site.

14. How do the ETDG II targeted research areas compare to those of ETDG I?

Answer – The targeted technology areas for ETDG I and II are the same. That is, they both have the same four categories which are 1) Water and Wastewater Projects, 2) Data Center Projects, 3) Customer-Side Electricity Storage Projects and 4) Industrial Energy Efficiency Projects. For the first three categories, IAW staff have kept some of the topics and listed additional topics of interest for our program. The most significant change was to the last target technology area list in Attachment F which is industrial energy efficiency projects. In this category, IAW staff lists general topics of interest while also listing topics of interest within specific industrial sectors that the IAW program is seeking projects in. Please also see the response to Question 4.

15. What are letters of support from partners as listed in Attachment G, item 10?

Answer –They are letters from industry, match fund providers, regulators, utilities or others that support the demonstration. Please note that we need this letter or these letters in addition to the letter(s) of support from the proposed demonstration site(s). <u>Satisfying item 7 in Attachment G does not automatically satisfy item 10.</u>

16. Regarding Attachment G, item #6 - Proof of lab bench scale, would a review document produced by an engineering consultant/firm be acceptable for this purpose?

Answer - Yes.

17. Are there any initial steps I can take to begin the process so that when the new info is released I am more prepared for the application? E.g. is there a registration process similar to SBIR?

Answer – Addendum 3 is now posted on the website at http://www.energy.ca.gov/contracts/pier.html#etdg. To sign up for our listserv, please go to the following website and subscribe: http://www.energy.ca.gov/listservers/index.html

18. I am working with a group of engineers in California developing a new solar energy system and would like the opportunity to submit an abstract for PON-11-501. From what I understand, the initial deadline for the abstracts of October 6th has been postponed. Can you give some guidance as to when the new submission date may be?

Answer - The deadline date for Abstracts is December 1, 2011 by 4:00 p.m.

19. The submission deadline dates haven't been finalized for the above program, have they? Will they show up as Addendum 3 (or whatever the next Add # would be)?

Answer - Addendum 3 is now posted on the website with the revised submission dates on our website at http://www.energy.ca.gov/contracts/pier.html#etdg

20. The manual says Attachment O is a separate word document located in www.energy.ca.gov/contracts. I couldn't find it there. Can you send me the link to this file?

Answer - Go to the following website: http://www.energy.ca.gov/contracts/pier.html#etdg, select Emerging Technology Demonstration Grant Program, PON-11-501, and select Files for Solicitation and click on Attachment O.

21. Is a letter of support allowable from the host of the demonstration site, if they're acting as the industrial (in this case, wastewater) partner? Or must the letters of support originate from entities entirely outside the project?

Answer - Please refer to the following for details about required letters of support, intent, or commitment:

- Attachment G items 7, 10 and 12;
- Attachment H section 1 item 5; and
- Attachment H section 2 criterion 2

A letter from the demonstration site (item 7 in Attachment G) will not substitute for letter(s) of support from investor-owned utilities or other industry stakeholders (item 10 in Attachment G).

22. Does the Prevailing Wage requirement need to be determined for the Abstract?

Answer – Attachment A, item 7 asks whether the budget includes prevailing wage. However, since applicants' abstracts will not include a detailed budget, we will NOT require applicants to check item 7 of Attachment A during Stage 1. Applicants may check "yes" or "no", but the response will have no bearing on the Stage 1 screening.

Applicants will be required to check item 7 of Attachment A and produce detailed budgets that comply with all requirements in their Stage 2 formal proposals.

Please see section 10 in the manual as well as Attachments K, L and M for Prevailing Wage requirements.

23. Are emissions requirements site specific?

Answer – Data on anticipated emissions reductions will be site-specific, and then anticipated reductions after broader market adoption can be inferred with quantitative justifications for any assumptions given. See Attachment H for details.

Projects must comply with all local emissions requirements, regulations and permitting.

24. Is there a preference between renewable NG vs. conventional NG?

Answer – Projects that either reduce the consumption of conventional natural gas or boost the production or utilization of biogas are both acceptable. Projects will be scored on their individual merits as indicated in Attachments G and H.

25. We are strongly considering submitting a grant proposal to this grant program to demonstrate a novel, solar energy powered aerated compost facility (that also significantly reduces air pollution from the compost operation, as well as green house gas and NOx reduction by switching from diesel to solar and not hooking up to the grid, except for backup power). It will be available to the entire California organics recycling industry as open source knowledge. We understand as the Manual states, "Projects must be relevant to California's industries (see Targeted Technology Areas, Attachment F)." However, we cannot find "Attachment F" on the website (http://www.energy.ca.gov/contracts/PON-11-501). Can you please send it to me, or let me know where we might find it?

Answer – The technology you describe would be acceptable under Attachment F. This Attachment is in the application manual itself which is found at: http://www.energy.ca.gov/contracts/PON-11-501/PON-11-501/Addendum-03/. The following is a summary of how you can find all the attachments referenced in the application manual:

- Attachments A, B, D, E, N, and O: please go to: http://www.energy.ca.gov/contracts/pier.html#etdg, select Emerging Technology Demonstration Grant Program, Program Opportunity Notice, PON-11-501 and select Files for Solicitation.
- Attachments C, F, G, H, I, J, K, L, and M: please go to:
 http://www.energy.ca.gov/contracts/pier.html#etdg, select Emerging Technology

 Demonstration Grant Program, Program Opportunity Notice, PON-11-501 and select

 Addendum 3. Attachment F, plus the other attachments listed above in this bullet, are in the
 addendum 3 application manual file itself.
- 26. I was wondering if this is a yearly solicitation, or if this is a one-time program. My group would like to apply, but we are debating whether to apply this year or wait a year.

Answer – The 2011 Emerging Technology Demonstration Grant program is not a yearly solicitation. Each Industrial/Agriculture/Water solicitation is undertaken on a time frame contingent on the availability of research funds. For updates of future funding opportunities, please sign up on the listserv at: http://www.energy.ca.gov/listservers/index.html.

27. We are respectfully requesting clarification and definition of the applicable criteria to the following: In the application manual on page 17, item H you state the following:

"The Applicant proposes a technology that has been demonstrated at an industrial scale or is commercially available."

Answer – Item H, page 17, refers to one of the reasons why an abstract or proposal would be rejected and not considered for funding. We seek technologies that are either emerging and not yet commercialized, or are commercialized but would be deployed in a novel application or scale in the proposed project. Please see Attachment H, section 2 for our quantitative scoring criteria related to the need for demonstration projects that advance science and technology not adequately addressed by competitive or regulated markets.

28. We will submit under Sole Source due to our US patent awarded. Your thoughts and advice are appreciated.

Answer – This solicitation PON-11-501 is a competitive process, so therefore sole source funding requests are not eligible to apply.

29. Is there a template for the abstract for PON-11-501 which is due on November 21? I am aware of what is outlined in the application manual, but are there template(s) like there are for the final proposal? Additionally, an example of a previously accepted abstract would be very helpful.

Answer – Unfortunately there is no template for the abstracts, but Attachment G identifies all required content. Although previously-accepted abstracts from the 2009 ETDG I solicitation are available, they did not follow the same format called for in this solicitation.

30. The Application Manual states that the CEC is encouraging the use of grant funds for equipment purchase. If we purchase equipment with funds and use another source of funding for wages, will we still have to follow prevailing wage guidelines for the project?

Answer – Yes. Payment of prevailing wages is required for public works projects, defined in California Labor Code Section 1720 as "construction, alteration, demolition, installation, or repair work done under contract and paid for in whole or in part out of public funds". Please refer to Attachment M and/or contact the California Department of Industrial Relations (DIR) at (415) 703-4774 for further information.

Applicants are encouraged to use match funds for equipment purchases. See Question 124.

31. The Application Manual has some very general information regarding the California Environmental Quality Act (CEQA) requirements. Are there any further or particular CEQA requirements that we need to be aware of?

Answer – Please refer to http://ceres.ca.gov/ceqa/ and Title 20, California Code of Regulations, Chapter 6, Article 1 (including section 2308). CEQA requirements (e.g., preparation of a negative declaration or environmental impact report) must be met prior to the Energy Commission approving the grant.

As time is of the essence, the project will be evaluated in Attachments G and H as to the likelihood of completing the project work scope by March 30, 2015.

32. I am working on the PIER grant abstract on behalf of Western Municipal Water District.

Western is a local special district formed by the vote of the electorate of Riverside County. So my question is:

To be eligible for CEC PIER funds does Western need to register as a California business entity with the Secretary of State – when in fact Western isn't a business entity but a local public agency?

Answer – Local governments, special districts and other public agencies (e.g., school districts, UC, CSU) do not need to register with the Secretary of State.

33. Our product development work is being done in India due to lower costs and proximity to some of the end users (utilities and townships for energy and water usage efficiency). In addition, they are our first export customers. Can CEC funds be used for the development work?

Answer – No. CEC funds cannot be used for development work. The CEC funds are to demonstrate emerging technologies that are past the "proof-of-concept" state, with a bench or pilot study already completed. The technology must meet the needs of a relevant industrial sector in California such that it can be the market for the technology demonstrated with CEC funds. Should the demonstration be a success, there must be a commercialization plan to deploy the technology in California within three years of the project end date. The demonstration site must be in California with support for the project from California utilities and stakeholders.

Investor Owned Utility (IOU) Questions:

34. What is the definition of an Investor-owned utility?

Answer – Investor-owned utilities (IOUs) are publically traded companies that provide electric and/or natural gas to California end-users. For the purpose of this solicitation, demonstrations must be located in a California investor-owned utility (electric or natural gas) service territory. If the demonstration saves electricity, the project must be located in one of these California IOU areas: Pacific Gas and Electric, San Diego Gas and Electric, and Southern California Edison. If the project saves natural gas, then the project must be located in one of these IOU areas: Pacific Gas and Electric, San Diego Gas and Electric and Southern California Gas. If the project saves both electricity and natural gas, the demonstration site must be located in any of the above territories. Please see Question 39.

35. I don't understand the definition of an investor-owned utility. Does that mean anyone who gets electricity or gas from a CA entity? Do most water and wastewater utilities fall under that category?

Answer – Please see response to Question 34 above. As water and wastewater utilities may obtain their energy from investor-owned utilities, Applicants should consult with their local electric and gas utility to verify that they are an investor-owned utility as described in Question 2.

36. What constitutes an IOU service territory to be eligible?

Answer – Please see response to Question 34.

37. We are a company based in Georgia. We want to apply for a data center cooling project and we will partner with a company based in CA for demonstration. However we will solely provide matching funds and our partner in CA will only provide demonstration site. Is this considered investor owned facility? Will this be disqualified?

Answer – The demonstration site must be in an investor-owned utility service area. Match funds supplied must meet the requirements of this solicitation as indicated in Section 9. Please also see response to Question 34.

38. Is Investor-owned referring to Electricity and Natural Gas only? In my case if we have demonstration site is wastewater plants in say, in Sacramento Regional County Sanitation District or EBMUD, do they qualify?

Answer – The project demonstration site must be within an investor-owned utility service territory. If the proposed demonstration site only receives natural gas from an investor-owned utility then the emerging technology must reduce natural gas consumption. Similarly, if the demonstration site only receives electricity from an investor-owned utility, then the emerging technology must reduce electricity consumption. Please see Question 39 for demonstration sites that save electricity and natural gas but have only one of these services provided by an IOU.

39. I understand that the project must be in an IOU service territory, but if the project is receiving natural gas from PG&E, is the project considered an IOU even if it is located on a POU for electricity since it is receiving gas from an IOU? Also, if our project is targeting electricity usage, will it still qualify as an IOU while receiving gas from an IOU, and not the electricity?

Answer – The project is ineligible if it is not located in an investor-owned utility service area.

Please refer to the table below.

Will the proposed demonstration site be acceptable?	The project has electricity or water benefits only	The project has natural gas benefits only	The project has benefits for both services
The demonstration site has an IOU for electricity service only	Yes	No	Yes
The demonstration site has an IOU for natural gas service only	No	Yes	Yes
The demonstration site has an IOU for both services	Yes	Yes	Yes

The water-saving benefits of proposed technologies will count as "electricity" saved because the treatment and conveyance of fresh water uses electricity. If the demonstration only saves water, and the site is in a non-IOU electricity service area, the project site will be ineligible.

40. RE: IOU service territory. Is a demonstration site eligible if it is a direct access customer or self-generates?

Answer – Yes. It does not matter whether a demonstration site is a direct access customer so long as the site is located in a California investor-owned utility service area for the service that would be benefited (natural gas or electricity) and the project directly benefits California electric and/or natural gas ratepayers. Please also see response to Question 34.

41. If the project receives electricity from a publicly owned utility (POU) (e.g., SMUD) but receives natural gas from PG&E, is this project eligible? Also, if the project is to benefit both electricity and not natural gas ratepayers would the same situation apply?

Answer – Please see responses to Questions 38 and 39.

42. Are local utilities considered to be IOUs, for example cities Palo Alto and Alameda provide utilities but fall under PG&E. Are they still considered part of IOU?

Answer – No. The City of Palo Alto and the City of Alameda are publicly owned utilities and are not IOUs. Please refer to response to Question 34.

43. Are projects in SMUD territory using PG&E natural gas qualified as being in an IOU territory?

Please refer to response to Question 38 and 39.

44. Is all of Los Angeles in an IOU territory?

Answer – The City of Los Angeles is served by the Los Angeles Department of Power and Water (LADWP), a publicly owned electric utility. However, except for the City of Long Beach, all of the City of Los Angeles receives natural gas from Southern California Gas, an investor-owned utility. Parts of the County of Los Angeles receive power from Southern California Edison and Southern California Gas Company (Sempra), all IOUs. Please check with your intended demonstration site to determine who their energy providers are.

45. On page 14, it is mentioned that the demonstration must be made 'in an investor-owned utility (IOU) territory'. Is that to be understood in such a way that the project must be made in collaboration with one of the 4 IOUs that are noted on page 35? Or just that the site physically must be in the area serviced by one of those 4 utilities?

Answer – Please see responses to Questions 38 and 39.

Match funding and Cost-Share Funding Questions:

46. Can we combine or utilize PIER funds in conjunction with California Solar Initiative (CSI) or Self Generation Incentive Program (SGIP) funds?

Answer – You may utilize funds from other entities as match funds subject to section 9 of the application manual. However, other <u>Public Interest Energy Research (PIER) program funds will not be incentivized as cost share</u>. Funds from any other entities will be incentivized only if they have already been awarded and will be used exclusively for the ETDG II project.

47. Is the match fund requirement 25% of the total project budget or 25% of the PIER fund requested? For instance, what is the minimum match funds required for a PIER request of \$750K?

Answer – Match funding equivalent to at least 25% of the requested PIER funding is required in cash. Please review section 9 "Match Funding Requirements" of the revised application manual in

Addendum 3. For example, for a project that requests \$750K in PIER funds, the match funds must be at least \$187.5K.

48. Can the prime contractor count the value of donated labor as cost share?

Answer – No. In-kind prime labor (while certainly allowable) cannot count towards the required "cash" match funds of at least 25% of requested PIER funds. Please see section 9 "Match Funding Requirements" of the revised application manual released under addendum 3.

49. A demonstration host site (not the prime) procures and installs the project and retains ownership. Is the procurement and installation considered co-funding?

Answer – If the demonstration site procures and installs the emerging technology hardware/equipment that is the focus of the proposal, then it can be counted as match funds. The Prime contractor must provide at the project kick-off letter(s) from the demonstration site on what items will be pledged as match along their monetary value. These letter(s) can also be included as part of Stages 1 and 2. Keep in mind that a letter showing intent to provide at least the demonstration site itself is required in Stage 1. Once the project begins, the Prime must provide a detailed invoice to reconcile the pledged match funds with actual match funds provided for length of the project.

50. What is the date that match funds need to be incurred?

Answer – As indicated in Attachment B, Scope of Work, Task 1.6, applicants must provide to the Energy Commission letter(s) of commitment for the stated match funds for the awarded project at the project kick-off meeting and the match funds must be spent concurrently or in advance of PIER funds for each task during the term of the agreement. Therefore, funds spent by the Applicant before the project kicks off cannot be counted as match funds.

51. Can match funds come from subcontractors?

Answer - Yes, as long as they meet the requirements for match funds (see Section 9 of the revised application manual).

52. Can equipment purchased before the project be considered match funds?

Answer – No. Equipment purchased or work done outside of the grant award term cannot be counted towards match funding requirements.

53. If equipment is provided at no cost to the project by the manufacturer, how do we determine the amount of match funds?

Answer - The current market value of the equipment can be counted as match. At the project kick-off meeting, the Applicant will need a letter from the manufacturer stating that the equipment will be donated and its respective values.

54. How is equipment provided by a subcontractor considered/valued as match?

Answer – The equipment is valued at the current market rate in its current condition (new equipment or used).

55. Is in-kind labor OK if provided by host site for equipment procurement and installation?

Answer – Yes, demonstration site in-kind labor can count as match as long as the site is not the Prime. Match funds may come from the Prime contractor, subcontractors, or the demonstration site but Prime contractor in-kind labor cannot be counted towards match funding. Section 9 of the application manual states: Match funding equivalent to 25% of the requested PIER funding is required in cash. "Cash" is defined as equipment, materials, travel, information technology (IT) services, and subcontractor costs.

56. Can the host site donate the equipment and can it be counted as match?

Answer – Yes, and please see response to Question 54.

57. Can an IOU provide engineering/other help pre- or post-project that could be considered as match?

Answer – The investor-owned utilities can provide engineering or other help. However, for it to be counted as match it must be provided during the term of the project. Labor/expertise provided by IOUs as subcontractors to the project can be considered "cash" match as stated in Section 9 of the application manual.

58. What subcontractor costs could be considered as match funds, can technology itself, their labor and what else?

Answer- The subcontractor's technology and labor can be counted as match. Please see Section 9 of the revised application manual for match funding requirements.

59. First stage – we explain match fund description but at what point do you need us to demonstrate that the match funds are available.

Answer – You will have to quantify what the total matching funds are in Stage 1. The letter(s) of commitment for the match is required in Stage 2 indicating the amount from the various contributors. Please refer to Attachments G and H.

60. Is the cost of the Measurement and Verification contract allowable as cost share, assuming it's paid from funds outside of PIER?

Answer - Yes, and the measurement and verification must be conducted by a third party independent contractor/vendor. Please also see response to Question 107.

61. Can direct labor be utilized to identify and obtain matching funds be used for "match funds"? (Exhibit A, Work Statement, pg 6)

Answer – No. The costs of obtaining match funding cannot be applied towards the match funding requirement.

62. Can equipment and hardware funded by a previous PIER program be utilized for cost share?

Answer – No. Existing or previous PIER funds cannot be used as match funds towards other PIER funds. Please also see Question 46.

63. Can all or part of equipment funded with unplanned match funds in a previous PIER program be utilized as match funds for this program?

Answer – No. Unplanned match funds from a previous PIER project cannot receive credit as match funding for this solicitation.

64. Regarding the funding, we understand that the match funding need to be as a minimum 25% percent of total PIER funding. Is that correct? Or does the total match funding need to be equivalent to the PIER funding (being 25% the cash match funding)?

Answer – Per section 9 Match Funding Requirements in the application manual, match funding is required to be at least 25% of the total amount of PIER funds requested in the grant. Match funds counted toward this amount must satisfy the definition of "cash" provided in the manual.

For example, an applicant asks for \$1,000,000 in PIER funding. Our requirement is for the "cash" match funds to equal at least \$250,000, 25% of the PIER funds requested. Of course, higher levels of match funds will be scored higher as indicated in Attachment H section 2. Match funds outside the definition of "cash", such as in-kind prime contractor labor, are allowable but not incentivized.

65. What is the earliest date that project purchases/expenditures can be counted towards the matching requirements?

Answer – Applicants are not prohibited from doing preliminary work using their own time and resources to support any proposed project. However, any funds claimed as match funds, as well as any award funds, may only be used within the official term of the signed grant agreement.

66. We are using University of California for our M&V evaluation, and they have obtained other funding sources to do their evaluation work. Can their expenses related to the proposed project be counted as matching funds?

Answer – Yes, as long as the funds to be counted as match are not PIER funds.

67. Can subcontractor labor count toward match funding?

Answer - Yes.

68. Is there any restriction on whether subcontractors who provide match labor can also be paid from CEC funds for a portion of their work on the project?

Answer – No. Subcontractors may be funded with any combination of PIER and match funds.

69. Can you also confirm the level of detail/documentation required for matching contribution during abstract stage? Our plan is to describe our matching contribution at the abstract stage, and submit documentation at the proposal stage (if abstract is selected).

Answer – Your approach is correct. We need a quantified dollar amount and descriptions of the source(s) of match funds for the abstract stage, and then Stage 2 formal proposals will include detailed budgets that will account for all match funds. Letters of commitment for match funds for Stage 2 will improve the applicant's score under Attachment H section 2 criterion 8 "Match Funding (Cost)".

70. We have access to data center facility as well as research laboratory facility based in Atlanta, Georgia where we will do part of our research and development before demonstrating it in California. Can this be counted as matching funds? If yes, how can we put a number to it?

Answer – Applicants are not prohibited from doing preliminary work using their own time and resources to support any proposed projects. However, any funds claimed as match funds, as well as any award funds, may only be spent within the official term of the signed grant agreement. PIER award funds are subject to the "51% or greater" requirement to be spent in California and subject to criterion 7 in section 2 of Attachment H, while match funds are not subject to these requirements.

71. Can the cost share provided by the potential buyers and hardware/software developers be used as cost share for the CEC project?

Answer – The solicitation is clear on what is considered as match. Please see section 9 of the solicitation manual (Match Funding Requirements). If the potential buyers and HW/SW developers are providing cash that will be used exclusively for this project, it can be counted as cash match funds. Proof of match funds must be provided at the project kick-off and detailed invoices submitted to track match fund expenditures.

72. In the Abstract submittal do we need to provide budget breakdown for the amount of cost share by the various partners? This may vary depending upon their respective portion of the field work. However, the total minimum amount will be 25% of the budget expenditures.

Answer – You may provide the match fund breakdown in Stage 1, and we require a description of the total amount. You will be expected to provide breakdown in Stage 2 and provide proof of match funds at the project kick-off meeting.

Project Eligibility (including emerging technology and commercial availability questions):

73. How do you define "commercially available"? If a company already has a commercial project in operation such as an energy storage project but the technology hasn't been demonstrated in a community or customer side of the meter project, is this project eligible?

Answer – "Commercially available" is defined as a technology, product, system, etc. that is already available for purchase. Commercially available technology is eligible to apply if it is used in a novel application in a different industry than current commercial practice. An energy storage technology that hasn't been already demonstrated on the customer-side of the meter (please see Attachment O) is eligible to apply.

74. The utilities have an emerging technology definition. Does the CEC have a clear definition as well?

Answer – As indicated in Section 6 and Attachment F of the application manual, an emerging technology is one that has advanced past the "proof-of-concept" stage and is ready for demonstrations in industrial settings. Furthermore Appendix F states "Technologies to be demonstrated **must be beyond the "proof-of-concept" stage** with a convincing proof of performance at a laboratory scale or pilot scale. Applicants **MUST** certify that their proposed project is not duplicative of past projects funded by the PIER IAW program, utilities, or any other entities."

Please also refer to section 6 "Eligible Projects" in the application manual and to Question 73.

75. If the demonstration receives natural gas from an IOU, but electricity from a non-IOU, is my project eligible?

Answer – Please refer to response to Questions 38 and 39.

76. If a technology is commercially available but has not been demonstrated, is that OK?

Answer – Please see response to Question 73.

77. Targeted technology areas - Does agricultural wastewater treatment on-site qualify? (On-farm wastewater treatment)

Answer – Yes, if the demonstration site is in an investor-owned utility and the technology will reduce energy use on-site and meets the eligible project requirements in the application manual. Please also see response to Question 73 and 38.

78. If an emerging technology and a commercially available technology apply for same application will they receive the same score?

Answer – It is hard to say if they will both receive the same score. The overall score that each proposal receives will depend on how the individual proposal addresses the requirements of this solicitation based on the scoring criteria in Attachments G and H.

79. We have a product that is past the "proof of concept" stage. Our target market is larger commercial and government buildings, the food and beverage industries, and commercial greenhouses. Our "Condensing Flue Gas Heat Recovery" technology is designed to increase the efficiency of natural gas.

Answer-- If the technology meets the requirements of this PON and is not duplicative, it is eligible to be the subject of an application.

80. Does an Energy Harvesting / Recapture technology qualify? I have seen some harvesting technologies such as heat recovery classified under energy efficiency. The technology in question would be a kinetic energy recapture that is converted to electricity.

Answer - Emerging technologies that meet the requirements of this PON are eligible to apply. The proposed technology must belong to at least one of the four Targeted Technology Areas listed in Attachment F of the application manual.

81. Would the use of vibratory shear enhanced processing (VSEP) to recycle winery wastewater be eligible for the subject funding opportunity? The process would reduce electric power, heating, and water demand at a winery bottling facility. Or is this technology in this application already deemed to be "demonstrated"?

Answer – Ultimately it is up to the applicant to decide if their demonstration proposal is sufficiently novel in terms of application or scale of the demonstration.

Attachment O provides some recent projects funded by the IAW program, and applicants must also search elsewhere to make sure they are not proposing a duplicative application for their proposed technology.

Your abstract must address how your proposed demonstration differs from existing commercialized applications. Please see Attachment H, section 2 for our quantitative scoring criteria related to the need for projects and how they advance science and technology not adequately addressed by competitive or regulated markets.

82. I would like to know if this technology is eligible for the reference grant program. Our firm makes portable hydropower turbines that can be installed in irrigation canals or wastewater treatment outfalls to generate renewable energy. They recover energy from water that is otherwise wasted or unused. Energy from the turbines can reduce the use of new energy by water treatment facilities or irrigation operators. Does this technology qualify for the demonstration program grants?

Answer – Yes only if it meets the requirements of the PON. Please refer to Sections 6 and 7 of the application manual regarding project and applicant eligibility. Note that projects are ineligible if they are adequately funded by public or private entities, or involve technologies that are already commercially available and there is no advancement of science and technology.

83. My campus is interested in applying to the Emerging Technology Demonstration Grant (ETDG) solicitation but I don't know whether our demo project is eligible. We are in the LADWP service area but get our gas from So Cal Gas. We have an existing cogeneration system on campus using natural gas purchased from So Cal Gas. The electricity from the cogen system is used on site. We are interested in a demo project involving a water savings project associated with our cooling tower. The cooling tower is associated with the cogeneration system. Would this demonstration project be eligible for ETDG funding?

Answer – If a project provides natural gas benefits and the site has an IOU providing natural gas service such as Southern California Gas, the site is eligible. However it looks like this project will reduce water consumption, and since the energy savings associated with the treatment and conveyance of fresh water predominantly consumes electricity, the water-saving benefits of any proposed technologies will count as "electricity" with respect to determining the admissibility of a demonstration site. Thus, the demonstration site must be located in a California electric IOU service territory (SCE, PG&E, or SDG&E). Please see Question 39.

If the project saves <u>no</u> natural gas and the site is located in an IOU service area for natural gas but a non-IOU service area for electricity, then the demonstration site is not eligible.

84. We have been reviewing the material on the CEC and CA.gov websites and have some questions specific to our plans. We are working to create biodegradable products for consumer use in the hopes of decreasing the continued use of Styrofoam, plastics, and wood paper pulp products. Can someone suggest the correct grant funding avenues available?

Answer – The 2011 Emerging Technology Demonstration Grant Program is intended for projects involving emerging technologies past the proof-of-concept stage to be demonstrated at full-scale sites to save electricity, natural gas, or water, or to provide demand response capability, or any combination. Applicants are required to ask for between \$750,000 and \$2,000,000 of PIER funds and to provide match funds in cash equal to at least 25% of the requested amount of PIER funds. Further details provided in the application package will give you enough information to decide if this grant program is right for your organization.

85. I would like know if the following project is eligible for funding from PON-11-501:
An anaerobic digester located on a dairy farm that processes a mixture of dairy manure and food processing wastes, and the resulting biomethane is scrubbed and compressed for injection into a natural gas pipeline. The innovation is a specially modified heated, mixed covered lagoon that takes manure via pipeline from several surrounding dairies in addition to the site dairy.

Answer –PIER has funded many anaerobic digestion projects involving dairy manure and other wastes. You would need to specify the innovation and how it advances science and technology and improves the energy efficiency of industrial processes and agricultural operations, and how this project will overcome regulatory and other barriers to biomethane injection into natural gas pipelines.

86. The grant defines a project minimum of \$750,000. Nalco's technology is significantly less per site application (between \$50,000 and \$100,000 per application). Could Nalco, working with their partner Central Basin Water Agency, aggregate different sites into one "project?" For example could they identify 10 sites costing \$75,000 per site – create both site specific as well as aggregated data and meet the minimum threshold of \$750,000?

Answer – Per the "GRANT SOLICITATION AND APPLICATION PACKAGE", section 20 "Grounds for Rejection" states that an application can be rejected when "An Applicant submits more than one proposal for the same project or for minor variations of the same project."

Since the same technology is being demonstrated at multiple sites, the collection of site-specific data and aggregated data would be considered a minor variation of the same project. As a result, this proposal would be rejected and ineligible for consideration.

87. If aggregation is allowed, could they work with more than one partner? For example, could they partner with Central Basin within the districts jurisdiction and LADWP within the city boundaries?

Answer – If the proposal met the eligibility requirements of the solicitation (including no aggregation - see question 86), then working with more than one partner is allowed by this solicitation.

88. Technology demo sites were set up in India at our customer sites. Real-time data from these are accessible via web from US or anywhere. The overseas demo data and design would be used for the California demo and will help increase exports. In addition to the demo requirements in California, can we continue demo at these sites using the CEC project funds?

Under no circumstances can CEC funds be allowed to be spent outside of the United States. CEC funds are to be used for the benefit of California ratepayers, so a significant portion of the funds must be spent within California.

Project Demonstration Site (eligibility, prime and backup sites, etc) Questions:

89. What constitutes an eligible site?

Please refer to the application manual sections 6 and 7.

90. I am working on a project proposed with a local government. They own and have full control over the proposed demonstration site – is it still necessary to provide a secondary backup demonstration site?

Answer – It is not required for Applicants to provide backup demonstration site(s) for Stage 1. For Stage 2, Applicants can identify one or more back-up sites as described in Attachment H, Section 2, criterion 2 "Project Connection to the Market and Industry Partners" to receive a higher score in that category.

91. Can a demonstration site be a lab like SRI as long as they are located within an IOU territory?

Answer – Yes. The demonstration site must be located in an investor-owned utility service territory and the demonstration site must be an appropriate site for the technology being demonstrated. Please also refer to section 6 of the application manual which states: Projects must be relevant to California's industries (see Targeted Technology Areas, **Attachment F**), have the potential to be economically feasible, and have the support of industry and/or utilities. The proposed technologies must have advanced past the "proof-of-concept" stage and be ready for demonstrations in industrial settings.

92. What is required for backup project sites? Is a new letter of intent required? You might not be able to demonstrate exactly what you want at the backup versus the original demonstration site.

Answer – Backup sites are desirable, but letters of intent from them are not required. For Stage 2, letters of intent will lead to a higher proposal score. We do realize that if the project has to change demonstration sites, project specifics may change and we have provisions in our scope of work to select a new demonstration site.

93. What is the definition of an industrial site? Would a corporate site be considered an industrial site?

Answer – The technology proposed for demonstration must be relevant to at least one California industrial sector as indicated in Section 6 of the application manual. The applicant should select a demonstration site within the intended market for the technology being demonstrated. For example, an emerging technology that will reduce natural gas use in California's food processing industry should be demonstrated at a food processing facility to ensure end-user acceptance of measurement and verification report.

94. Can letters of commitment be provided in Stage 1?

Answer - Yes.

95. How much detail needs to be provided on back up sites and when in the process?

Answer – At a minimum, please provide names and locations and contact information (if available), and this can be provided as part of Stage 2. Please see the responses to Questions 90 and 92.

96. My partners and I have an innovative scheme for converting surplus off-peak electricity from the grid to low cost process heat and electric power. The components of the system are all state of the art or past proof of concept, but the "system" needs to be demonstrated. We have formed a partnership to apply for a grant from this program. We have selected a demonstration site that is willing to be included in the application Abstract. The demonstration site is a food processing plant that currently buys its electric power from a municipal water & power cooperative, not from an investor-owned utility. Is this

demonstration site disqualified from participation? If so, can you explain why the electric power must come from an investor-owned utility?

Answer - The project demonstration site must be within an investor-owned utility service territory. If the demonstration site is located in a California investor-owned utility service area, but purchases its power from someone else, the project is still eligible. The IOU requirement is because the funds for this solicitation come from ratepayers in investor-owned utility service areas.

97. Can the project include more than one demonstration site?

Answer – Projects can include more than one demonstration site if each demonstration is a unique/novel application of the proposed emerging technology. However, we will not fund multiple demonstration sites using the same technology in the same application. Given the funding limits it is recommended that Applicants select the single most appropriate demonstration site, with additional sites as backup. Please also see response to Question 86.

98. We are planning to do the demo in two or three different sites to cover a range of variables. Should all of the sites be located in California or can one of them be in a different State?

Answer - The demonstration site must be in California and in the service territory of a California investor-owned utility. Please see the responses to Questions 34 and 97.

99. Can you please clarify the requirement that a proposed demonstration site must be located in a California IOU service territory? If the proposed site is a direct access customer or self-generates, but still takes transmission & distribution service from a California IOU, is it still eligible as a demonstration site? In particular, we are considering a California-based water district as our demonstration site.

Answer - The project is eligible if the demonstration site is located in California in an investor-owned utility service area for the service that would be benefited (natural gas or electricity) and directly benefits California electric and/or natural gas ratepayers. Please see Section 7 of the Application Manual and Question 40.

100. My partners and I have an innovative scheme for converting surplus off-peak electricity from the grid to low cost process heat and electric power. The components of the system are all state of the art or passed proof of concept, but the "system" needs to be demonstrated.

We have formed a partnership to apply for a grant from this program. We have selected a demonstration site that is willing to be included in the application Abstract. The demonstration site is a food processing plant in Turlock, California, that currently buys its electric power from a municipal water & power cooperative, not from an investor-owned utility. Is this demonstration site disqualified from participation? If so, can you explain why the electric power must come from an investor-owned utility?

Answer – Customers from investor-owned utility (IOU) service areas provide the research funds that are the source of funding for this solicitation. Consequently, demonstration sites must be located in an IOU service territory for the service (electricity or natural gas) that would be benefitted by the proposed project. Please also see response to Questions 34 and 39.

101. One question we need to be clear on is whether the demonstration must be located in an investor-owned utility such as PG&E, SCE, SDG&E or whether we could demonstrate it in SMUD? We believe we may have a most suitable site within SMUD and need to understand the rationale for this particular restriction and whether it can be waived.

Answer – Please refer to the response to Questions 34 and 39.

102. In reference to PON-11-501 ETDG II, I was looking for examples of or general guidelines for demonstration site letters of intent. I want to make sure that we cover any key points.

Answer – The demonstration site letter of intent and the demonstration site letter of commitment correspond to Attachment G item 7a and Attachment H section 1 item 5, respectively. In these, the demonstration site representatives will certify that they intend / commit to setting aside adequate space, personnel, and time to support the proposed demonstration.

103. We are applying for the PIER grant PON-11-501 and will be focusing on Data Center energy efficiency and demand response. We had intended to submit the CA Department of Justice data center as our primary site but understand now that this site will not qualify, since it is in SMUD territory.

However, could we use the DOJ site as a "back-up" data center while the main data center is within the IOU territory.

Answer – No. If the project has electricity benefits only and the site's electricity provider is not an IOU, then the site is not eligible as either a primary or a backup site.

104. While there is no requirement for Applicants to reside in California, the proposed demonstration site must be located in California in an investor-owned utility service area and the project must directly benefit California's electric and/or natural gas ratepayers. We are a California based entity and so is our partner. One of our demo sites is located within an investor-owned utility service area however the specific site does not get its electricity or natural gas from an IOU.

Is this demonstration site eligible for this solicitation?

Answer – Yes. Please refer to Question 99.

105. We have already reached an initial agreement with a demonstration site that purchases power from PG&E. We are also considering another site to conduct the project, but we are not sure if they purchase power from one of the IOUs (we are still checking). Are there any exceptions to this requirement (i.e., demonstration site purchasing power from IOU) considering that the full scale projects can be implemented at any wastewater treatment plant purchasing power from the IOU agencies?

Answer – The requirement is that the demonstration project must be located in a California investorowned utility service area. There are no exceptions. 106. If we are bidding for the project grant, do we need to own the demonstration site? Or can we partner with someone who owns the data center site where demonstration will be carried out? Why is it mentioned that site must be investor owned?

Answer – No. You are not required to own the demonstration site. To clarify about "the site must be investor-owned", the requirement is for the site to be in located in an investor-owned utility (IOU) service territory.

Measurement and Verification (M&V) Questions:

107. Is there a preferred list of M&V vendors?

Answer – No. The Applicant is encouraged to work with the investor-owned utility that provides energy to the project demonstration site to select a qualified M&V vendor/contractor.

108. We're interested in doing data center demonstration project at UC San Diego. Can UC San Diego provide the third party monitoring AND verification?

Answer – The demonstration site cannot also provide 3rd party measurement and verification for the proposed technology. The measurement and verification must be from an unbiased independent third party. Therefore, UC San Diego cannot be both a demonstrate site and also provide monitoring and verification. Note this response is a clarification for the response given at the Pre-Proposal workshop on October 31st. Due to poor audio quality, staff only heard the second part of the question: Can UC San Diego provide third party verification? The IAW staff response was that UC San Diego can provide 3rd party measurement and verification and should coordinate with the investor-owned utility in whose service area the demonstration is located. This response is still valid if UC San Diego is not the demonstration site or otherwise involved in the demonstration.

109. What is considered to be 3rd party monitoring and verification (M&V)?

Answer – The vendor/contractor conducting the M&V must be independent and unbiased with the expertise and equipment to conduct the M&V. The M&V could be conducted by the investor-owned utilities (IOU), IOU recommended vendors, national labs, engineering firms, etc. The Applicant is encouraged to engage the California investor-owned utilities for recommendation/guidance on selecting an independent M&V vendor. Please see also response to Question 107.

110. If the project site is at a municipal (e.g., local government, special district) site and the actual testing is done by the operators, would a third party M&V contractor need to look at the collected data for the assessment?

Answer – Yes, you can sign non-disclosure agreements if the data is sensitive. The third party M&V contractor should also be engaged with the operators during the testing and data collection phase of the M&V period. Please also see response to question 109.

111. How comprehensively do we need to describe M&V activities in the abstract, proposal? Does the M&V subcontractor have to be identified at the abstract or final proposal phase? Are letters of commitment from partners and match-providers required at the abstract phase?

Answer – The amount of detail in the abstracts will be much less than in the Stage 2 formal proposal. Formal proposals will have detailed budgets with them (see Attachment D) that will identify most or all subcontractors, and must identify the M&V provider. The instructions in Attachment C state that in Attachment B, applicants will use Tasks 2.1 and 2.2 to verify at the beginning of the project that they have both an acceptable demonstration site and an M&V provider in place.

Rebates Questions:

112. Is there any specific utilities' energy efficiency rebate program that we should be targeting with the demonstrations?

Answer – No, we do not require Applicants to target a specific investor-owned utility (IOU) rebate program. Applicants are encouraged to engage with California investor-owned utilities before and during the project to facilitate the possibility of future rebates for the demonstrated technology should the demonstration be a success. If an incentive/rebates program does not exist, a successful demonstration could lead to its creation.

113. How important is the tie in to the utility incentive program?

Answer – One ultimate goal of this solicitation is to get demonstrated technologies into utility incentives program based on the results of the measurement and verification phase of the project. Applicants are encouraged to work with the investor-owned utility that provides energy to their selected demonstration site to help facilitate this goal.

Please see also response to Question 112.

114. Are we required to identify the specific utility energy efficiency rebate programs? What if our technology would not qualify for such a rebate?

Answer – Please refer to response to Question 3. Applicants are encouraged to engage with California investor-owned utilities before and during the project to facilitate the possibility of rebates for the demonstrated technology. If an incentive/rebates program does not exist, a successful demonstration could lead to its creation.

115. You mentioned the purpose of focusing on technologies that would be eligible for utility energy efficiency rebate programs is utility support. If our technology would not qualify, are there alternative ways to demonstrate utility support?

Answer –Please also see response to Question 112.

116. We are proposing an energy efficient wastewater treatment technology to replace conventional treatment plants or enhance the efficiency of such facilities. We are not aware of a particular existing utility rebate program for such substantial technology changes.

However, our technology would obviously be beneficial to the state energy situation and utilities. How do we address rebate programs that may be created in the future but do not exist now?

Answer – Please see response to Questions 112.

Royalties, Intellectual Properties and Terms and Conditions **Questions:**

117. I have a question about royalties on sales of systems after the program has ended.

Answer – Please see Section 25 of the Terms and Conditions for royalty obligations.

118. T&Cs - Are there royalties on the future sales of technology demonstrated for this PON?

Answer - Please see response to Question 117.

119. On page 12 of the Application Manual it references the PIER Grant Terms and Conditions with a website. It also says that "the Energy Commission reserves the right to modify the terms and conditions prior to executing grant agreements."

In number 11 on that page it states that applicants need to provide an affirmation that they will accept these terms.

As you may know, the standard PIER Grant Terms and Conditions do not work for the University of California. In response to this Lourdes DeMattos of University of California Office of the President, and Allan Ward of the CEC negotiated a set of PIER Grant Terms and Conditions that met the needs of the Energy Commission and of the Regents of the University of California. This was accomplished in June 2009. I believe those terms were used for several agreements.

Since this grant does not go through DGS, can the Energy Commission use its right to modify the terms and conditions by replacing the standard PIER Grant Terms and Conditions with the previously negotiated UC/PIER Grant Terms and Conditions if a University of California proposal is selected?

Answer – All applicants for this solicitation must agree to use the Standard PIER Terms and Conditions in Attachment N (please see Section 4 of Attachment A, Grant Cover Page). Public entities that cannot agree to these terms may be able to participate as subcontractors.

120. One of our potential manufacturer partners has questions regarding the intellectual property rights. They seek to retain all intellectual property associated with the equipment, methods and/or results, and request that CEC waives the related intellectual property rights. I am forwarding their request/questions:

Section 9 contracting and procurement procedures requires 'flow down' provisions to apply to third party subcontractors, specifically a) rights of parties regarding intellectual property and b) intellectual property items developed prior to this agreement.

Section 24, intellectual property items developed prior to this agreement is required to be identified in an attachment to the agreement. Although the CEC makes no claim to intellectual property that existed prior to the agreement, the CEC must clarify that they will make no claims associated with any and all equipment and methods to be provided by WesTech and/or WWETCO, whether or not designated in an attachment to the agreement.

Definitions, Section 23, specifically Subject Inventions, includes methods, machines and any new and useful improvement thereof. Although methods and equipment to perform this work existed prior to the agreement, the final configuration could be considered a 'new and useful improvement'. Consequently, the CEC must waive any and all rights to the same.

We would like to involve this manufacturer "WESTECH" in our study for technical reasons, but we have identified equivalent manufacturers in case if CEC doesn't waive these requirements. Please let me know.

Answer – The CEC cannot waive its intellectual property rights.

California Based Entity (CBE) Questions:

121. The requirements that demonstrations be conducted in California and that a California-Based Entity must be the prime contractor or subcontractor and receive 51% or greater of PIER funds are clear. In the Scoring Criteria (Appendix H), the Economic Investment in California section explains that the proposal "must document how the project will spend PIER funds in California". If employees of the prime contractor or a subcontractor are located outside California but carry out project work in California, do expenses for the labor, travel costs, and living expenses of those employees that are specifically involved with travel to California and work carried out in California qualify as PIER funds spent in California?

Answer – Payments made to out-of-state workers do not constitute funds spent in California. However, funds spent by out-of-state workers in California (e.g., hotel and food) can count as part of the 51 percent.

122. It has been indicated that CBEs and Non-CBEs conducting intrastate business in California should be registered with the California Secretary of State to enter into funding agreements. Does this mean that those who do not conduct business in California should not be registered? We are a company based out of Atlanta, GA and have clients in California. Please inform if we should register with CA Secretary of State?

Answer – If an entity is the prime contractor (the applicant) or will be listed as a subcontractor in the budget during Stage 2, it must be registered and in good standing with the California Secretary of State. If you are applying for a grant award then this requirement applies to you. Please see Attachment J item 8 and Attachment G.

123. We are a California-based entity and would fabricate equipment for this project in California. However, some of our materials will come from out of state. Do we have to partition our costs for materials and equipment into "money spent in California" and "money spent outside of California"?

Answer – The proposal must document how the project will spend PIER funds in California (see criterion 7 in Attachment H, Stage 2 Evaluation Criteria), meaning that the proposal must identify the in-state items or services that will be funded by PIER. Materials and equipment purchased outside of California do not count toward PIER funds spent in California. Consequently, the point of sale must be in California for funds to be counted as PIER funds spent in California.

Equipment (disposition, ownership, etc) Questions:

124. What happens to the equipment or project after the end date of March 30, 2015?

Answer – Please see Section 12 of the Terms and Conditions (Attachment N) and Section 9 of the application manual. At the end of the project, title to equipment (defined as items with a unit cost greater than \$5,000 and a useful life greater than one year) purchased with PIER funds vests in grant recipients, who may continue to use the equipment if the use is consistent with the intent of the original grant agreement.

Purchasing equipment with match funding is encouraged because there are no disposition requirements for equipment purchased with match funding.

125. What happens to equipment at the end of the project?

Answer – Please refer to Question 124.

126. Can you clarify if the program allows the end user to buy the unit, in case the unit will remain in place for the original purposes?

Answer - Please refer to Question 124.

Storage, PVs, Water/Wastewater Questions:

127. For water and wastewater projects, please discuss the concept of "new" technologies that integrate renewable resources like solar. Solar is not new. Can PV solar be integrated into the market in a new way? Would that qualify?

Answer – While the concept of solar or other renewable resources is not new, technologies to implement them may be new. New PV technologies that increase efficiency, reduce system size, cost, etc. are eligible to apply if: a) they are directly associated with and integral to an industrial process, b) they have not been demonstrated at this scale and application in the past, and c) there is substantial ratepayer benefit if demonstration is successful. The installation of PVs or other renewables just to generate electricity for on-site use in not eligible.

128. Customer side energy storage - Does this include only electricity or other forms of energy storage such as fuels?

Answer – Attachment F in the application manual contains the four Targeted Technology Areas. Storage projects should focus on electric storage but we are open to other storage technologies if they meet the requirements of the solicitation.

129. Is the program objective to test solutions within any particular power range (1-2 MW or 25-50 kW) for the Energy Storage solutions?

Answer – Though we require energy storage projects to apply strictly to the customer side of the meter, no power range is specified although the technology must be appropriate with respect to the demonstration site and the amount of funds requested.

130. Does the Energy storage units need to be UL certified? Or, is it possible to propose prototypes?

Answer – We do not require this specifically, although applicants must reach agreements with their demonstration site representatives on what (if any) requirements/conditions (Underwriter's Labs, National Fire Protection Agency, Federal Communications Commission, National Electric Code, etc.) they may require from the technology to be demonstrated. It is anticipated that after a successful demonstration, the technology would obtain the necessary certification and approvals on path to commercialization. Prototypes are eligible to apply, provided they can meet the requirements of this solicitation.

131. Is it the target of the program to test new Energy Storage technologies (like new battery chemistry) or is it acceptable to use existing technologies (e.g., Li-ion) with new solutions/applications?

Answer – Both concepts are acceptable, and proposals will be scored on their individual merits.

132. Would a new energy storage solution that would support Electric Vehicles fast charger applications be an acceptable project?

Answer – The storage application must be directly applicable to California's industrial sector(s) as stated in Section 6, eligible projects.

133. Could it be an acceptable proposal to offer a Battery Energy storage solution with reused electric vehicles batteries?

Answer – This is acceptable as long as the solution produces benefits for the industrial sector in any of the following: peak load reduction, load management, demand response, integration of renewable generation, support for utility ancillary services, or any combination of these. The proposed technology solution must be applicable to California's industrial base and be demonstrated at an appropriate industrial site within an investor-owned utility. Please see Attachment F.

134. PON 11-501 states that an application may be rejected for proposed technology that has already been demonstrated or is commercially available (page 17 of PON) but Attachment F indicates that new technologies that integrate renewable resources (biomass, solar) into the infrastructure and operation of water and wastewater treatment plants systems is an example

of an acceptable project idea. Given that solar is already commercially available, is the PON looking for novel solar integration that could utilize photovoltaic systems for this market segment or non photovoltaic solar technologies? I'm not clear on the apparent discrepancy in the language.

Answer –Solar PV is eligible if their proposed application is novel and/or needed by industry due to market conditions. Please see Attachment H, section 2 for our quantitative scoring criteria related to the need for demonstration projects that advance science and technology not adequately addressed by competitive or regulated markets.

135. The PON indicates that public and private entities may apply. May cities and counties then apply for the water and wastewater category? Is the use of the term industrial in the PON referring to the private market sector or to the scale of the project?

Answer – Yes, cities and counties could apply. Anyone can apply if they are willing to use our Terms and Conditions and meet the requirements of the PON. Applicants must ensure that the proposed technology is relevant to California's industrial sectors and will be demonstrated at an appropriate scale to ensure commercialization of the technology if successfully demonstrated. Applicants must also ensure that the selected demonstration site is within an investor-owned utility service territory.

136. Our firm has technology that would be ideally suited for this RFP, however I unfortunately did not see this request in time to meet all of the requirements for the submission. The technology would yield substantial savings by utilizing newly perfected solids from water separation processes which primarily rely on gravity and very specific flow patterns which greatly reduce the use of electricity. As an example, tests show Municipal sewage treatment electricity consumption is reduced by approximately 60%, similar results for industrial and food processing plants. We also turn the solids into fuel pellets which tests indicate have a higher calorific output than coal and without some of the emissions. At any rate the point of sending this note is to make you aware of this technology and to request any information relating to any other similar opportunities that may exist and for which I am not aware. If the CEC has some other programs or suggestions to some test sites I would greatly appreciate that information. I am a Canadian Citizen but do have land in Palm Springs and am very interested in developing this process in California.

Answer - You can always check the Energy Commission's solicitation website for current solicitations that may match your requirements. If your area is water treatment, then ETDG II is the most appropriate active solicitation for emerging technologies that the Energy Commission offers right now.

Venture Capital for Match Funds Question:

137. The cost share we have arranged is through *Series A Preferred stock financing* provided by a San Francisco based Venture Capital firm namely, VII Peaks Inc through its subsidiary VII Peaks Venture Capital V LLC. Essentially, this amounts to enMole providing the cost share from internally raised funds. Please confirm if this would be an acceptable mechanism for cost share to CEC. The TERMS SHEET for this financing is enclosed for your ready reference.

A letter from the above firm stating their funding to enMole Inc. for commercializing our technology will be attached to the proposal. Additional cost share may also come from our teaming partners on this project and will be identified in the proposal.

Answer - This approach is an acceptable mechanism for meeting the cost share requirement for this solicitation. The Applicant will be required, at the project kick-off meeting, to provide proof that the cash raised through this stock sale exists and in the amount stated in the proposal. The Applicant should discuss in their proposal (Stage 2) the security of the match funds and plans on replacing the match funds if proposed match funds are significantly reduced or lost (see Attachment H, Section 8: Match Funding).

List of Participants from October 31st Workshop:

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